PRESENTER: You know, this step was a little new to me because the Forest Service kind of does it and the Fish & Wildlife Service in its planning efforts doesn't do this step. But I kind of liked it, and I found a couple examples of things we had done. We didn't call it Analysis of the Management Situation, but I think it's very appropriate here. So I'm just going to start out with one slide with some kind of general stuff, and then I'm going to give you a few examples and point to where they are in the back of your notebook, too.

And so, you know, the way I kind of view this step is we have -- we had an issue identification and prep plan and planning criteria, and then we have data collection, and we're going to go from here into development of alternatives in step 5. So one way to view this step is taking, in this case, the social data, and turning it into useful information and providing some context for it. So I wanted to just review a couple of principles that have been helpful to me at this stage of the planning process, whether I called it an AMS or not, and I'm not going to spend a lot of time on these because they should be familiar.

Be parsimonious is good because, you know, we've talked about not just loading this living document up with data because it's accessible. You know, this is where we have to pick and choose and move more toward what we're going to use to develop alternatives and assess affects. So this is where we take that mound of data, that steaming mound of data that we've collected in step 3, and we're really winnowing it down into really information that's going to be useful as we proceed through the

planning process. Tell stories using the data rather than presenting it. This is where -this is the stage where we kind of start developing those stories based on our data, and
I put a thing, "use quotes and photos liberally." I have an example of how a photo is
worth a thousand words a couple of slides from now. You know, in the social Affected
Environment Section and in the impact section of your EIS, too, I really like to use
quotes. The question came up at the last break, "Well, I have some -- a really colorful
guy that I talked to, and I certainly don't want to claim he represents the views of all of
this group of people, but, you know, it's kind of interesting stuff. What should I do?"
And I said, "Oh, you know, throw a quote in there and use it to anchor one end of the
set of values or beliefs of this user group and that way you get the color in there and
you get expressions in people's own words but you're not claiming it represents the
views of all ranchers or all environmentalists or all motorized recreational users.

And the flip sides of do's are usually don'ts, right? You know, don't just have a lot of date nah there without saying why it's relevant or, you know, and then this one -- I'll spend just a second talking about this, how disconnects among issues, affected environments, impacts and monitoring, this is where we should start thinking about what information Weaver, what social information do we have that's relevant that can feed into development of alternatives, and we'll talk more about that into step 5. And what impacts are we already suspecting are going to be out there that we want to pay attention to? And we want to make sure that we have enough stuff in this AMS document that will allow us -- that will give us a firm basis for assessing impacts, and this is the time to kind of check, add stuff, delete stuff, beef some sections up.

This -- I want to say a couple words about this, because it was an issue that came up in one of the earlier planning classes. So we developed this slide as a kind of a response to it. You know, you have your community profiles or your county profiles, okay, and you have somehow determined that the multi-county planning area is appropriate.

Maybe you have national values and interests, too, but for your immediate study area you maybe have a county, a multi-county area, a set of communities. So what do you --you have this EPS system which gives you information. So, you know, you can put 20 or 37 pages of information about each county or community and have it as an appendix and then you'll be able to wave your document and say, "What do you mean we didn't look at social issues? We have 400 pages on social affected environment in this document." Which is sometimes used as one measure of the quality of coverage, is the volume of coverage, you know, in the absence of meaning.

But we have -- you know -- you have all this information, and one way we've done it is to -- you know, if you have a set of communities, you can pick your indicator variables, the variables that tell the story of what communities are associated to your area, with your area in some way, and you can pick those communities and you can pick the indicator variables that best describe those associations and give the background of what type of people these are and what are they doing for a living and what are their connections to the BLM lands, to other lands in the area, which John will talk more about later in this step, and you can just put those in a table. You know, you've seen lots of tables in documents that maybe pick 10 variables and then have a set of counties or communities on -- you know, maybe in the rows and then have the data in the columns, and then you can talk about, you know, some of the meaningful differences

and some of the distinctions, some of the similarities between that -- among that set of communities and some of the distinctions that are present and talk about why they're relevant for the types of actions you're proposing.

If you have a real lot of communities -- you know, in the Interior Columbia Basin Project we had about 400 rural communities, and we wanted to present some information about them. We wanted to talk about impacts. But obviously we were not going to -- and it was a very programmatic, you know, basin-wide EIS. So we didn't know what was going to happen anywhere, so you couldn't talk about impacts on Bend or on Burns or on, you know, Priest River somewhere. But it was -- so what we did was we grouped communities, and so if you have -- that probably won't happen in this -- in our situations, we won't have hundreds of communities, but, you know, essentially what we did was kind of a qualitative cluster analysis where we looked for different ways to group these communities and in ways that would make sense so we could say, well, this type of community is most likely to be affected this way. I'm not going to go into that in a lot of detail but just want you to know that is one approach if you're faced with kind of an overwhelming kind of data, is to look for natural ways to group these entities and then talk about impacts to that group as a whole, and you will want -- if you're doing that, of course, you will want to describe those groups in your affected environment chapter and then you will want to assess effects on that group of communities in your impacts chapter. So make sure that connection is there.

This is a real simple example which my friends in Alaska may appreciate here. This is the Tokiak National Wildlife Refuge Plan. Alaska is kind of good because the

communities separate themselves so well since they're not connected by any road system except, you know, around Anchorage, down in the Kenai, maybe, that it's really easy to identify the set of communities associated with a refuge or with a BLM area or with a National Forest, and so, you know, just by looking at this simple set of information, which is kind of dark on this screen, I guess this is one -- it looks great on my monitor, but it's kind of muddy there, so I'm sorry about that. We'll make those a little brighter. You know, you can tell that, you know, Dillingham is probably kind of the trade center for this region and it has more diverse types of people in it. It's a little less dependent on commercial fishing. The economy is probably a little more diverse. There's a lower proportion of native Alaskans in the community, so more different types of people have moved in, and just by the virtue of the population size it suggests it's kind of a trade center and a regional center for this area, which, indeed, it is. The rest of the communities are very small, ice late, heavily dependent on fishing, and, you know, range from 93% to 97% native Alaskans. So you know right away that these are small, isolated communities, subsistence use of resources is going to be a major issue. Anything that impacts the ability of these residents to engage in subsistence activities is going to be problematic in terms of refuge management. So just this one table gives you a fair amount of information. Doesn't answer all your questions, but it kind of lays some of the groundwork.

And a picture of Tokiak, you know, helps portray the fact that -- and really you could expand this in Google earth and look outwards and see just how much more of the landscape that's like this is around it to see that there's not anything right out of the picture, that this is just a little outpost with an airstrip that's halfway between somewhere

and nowhere and is very dependent on refuge resources for its existence in the physical and survival -- physical and cultural survival of the inhabitants of these towns.

And I want to back up here because I want to say another word or two about the Tokiak Refuge, and I have an example of what could be considered part of an AMS, and it's -- you can look at it if you want to page through your notebook but you don't really have to, but if you want to find it later, it's under general examples, and it's the third for last item in that, and it's just 10 pages. I'm just going to tell you real quickly what's in it as an example, and it's on subsistence opportunities, and it's kind of an AMS on subsistence opportunities associated with a refuge. So we kind of approach the AMS, although we didn't call it that, on an issue-by-issue basis.

So this starts out by having a series of questions. How should the Tokiak Refuge define and manage for continued subsistence opportunities? How will the refuge know if subsistence uses are becoming restricted? What are the main influences on subsistence activities on the three main river systems associated with the refuge? Because those were really the veins and arteries of the communities, they were the lifeblood. And how is recreational use of the three main river systems affecting subsistence? So it's kind of an issue statement, you know, formed as a series of questions. And then it has couple paragraphs kind of describing what the issues are in a little more detail.

Well, then the next section is called laws and regulations, and we have, you know a few pages on what does the refuge currently do and what laws are in place, what policies

under place under existing management that address these issues, subsistence opportunities.

Then we have a list of what we call factors or conditions affecting subsistence. So subsistence use is an issue -- you know, what affects that and what influence does the refuge have on that? We have status and availability of fish and wildlife populations, is kind of an obvious one. Access to preferred and traditional fishing areas. Trespass issues. Conflicts with sport anglers. Litter and waste in the river corridor. Opportunity for a safe experience, because one of the issues we had was the sport -- the subsistence motorboats were kind of small motor, you know, moving up and down river at a fairly slow rate of speed, whereas some of the lodges, some of the sport fishing lodges on the river had some real guns out there, had some real fast boats, and they would want to get their anglers to the fishing holes fast, and safety was an issue, and there had been some near collisions. And the social aspects of subsistence.

Then we had a section on current management. What does the refuge do right now to manage subsistence resources? We talked about the river ranger program. We talked about a system of contacts we have with fishing groups at the airport. We have limits on guided use and some fishing and camping regulations that the Alaska Department of Fish & Game was in charge of enacting and maintaining and enforcing. So we did this with our state partner.

Then we have a section on data gaps. You know, the previous sections had what information was available. So then we say, well, what information do we need? And

then the last section we called possible ways to address the issue. And so that laid the groundwork for development of alternatives for this particular issue, and we got these from interviews with subsistence users in the villages and from interviews and a more quantitative survey of sport anglers along the river that we did.

So we had -- you know, we have a go -- and this is -- you know this, isn't very long. This is just a few pages, but, you know, I think it kind of captures the spirit of what an AMS might look like for this particular issue. So I wanted to give that as an example and point out that it's in your booklet.

One of the -- shifting topics a little bit here -- one of the items that John mentioned as being part of an AMS was dependency of communities on BLM land, and John is going to get into this from an economic, and to some extent, a social standpoint because the two are related, but I wanted to at this point give you a little more information about this aspect of communities and kind of segue a little into community resiliency, which Stacy brought up yesterday. That seems like a week ago, doesn't it? Doesn't it seem like we've been here for days? I can't understand this.

But this was kind of a neat study and it has a bearing on a lot of different issues we've talked about and has some kind of cool methodological tips. So, I wanted to discuss this, and I thought AMS might be the right point because it leads to a discussion of resiliency and dependency and it could have been put in step 3 but we needed some extra stuff to put in step 4, so it fit kind of well here in here, too. So that's why it's here. But it does involve data collection also.

And this was a study done by the University of Idaho for the Interior Columbia Basin Project, and as I mentioned, we had 400 rural communities, and so the goal was to learn something about them, and you're not going to do surveys of residents in 400 communities, even if you have the luxury of working on a \$30 million project, right? There's still -- social allocation of that was this much compared to landscape ecology.

So the methodology had to be fairly efficient. So what was done was we held focus groups -- the university held focus groups with a stratified number of interests in each community, and by stratified I mean kind of like Joan was talking about, you know, you identify a series of kind of community leaders. There was somebody -- there was an effected official from each community was invited to participate and a leader -- a business leader and an environmental leader and so forth to kind of represent a cross section of community interests from kind of a leadership standpoint.

So it ranged from maybe seven to eight or nine people in each community and they were asked to participate, and most of them did, and they were given a workbook to complete before they attended this focus group meeting, which lasted about a half day. So they complete their workbook, they come to the meeting, and then they would discuss their workbook results as a group and kind of talk about differences of opinion or areas of consensus and so forth, and the goal was to try and reach, you know, kind of an agreement about the important characteristics of this community from the standpoint of this range of community leaders.

This is expedient. This is maybe overly efficient, but it was not a bad way to collect some important information about a range of communities. We didn't do all 400. We did 200. So we took a 50% sample of the communities.

And I also want to point out that under General Examples in your binder, the second or middle item is a copy of the workbook, and this is kind of cool because -- and you can gain some information from this and you can help develop some interview topics from it, and I'm going to share some of the research results from the study because they're applicable to communities anywhere. And so this is called a workbook for examining the characteristics of your community, and it has a number of sections. It has a cover letter. It has a section on community character where people are listing special places in their community. And then most of the questions, though, are kind of in a closed-ended format, because like most kind of broad ranging survey quantitative efforts, you want lots of closed ended questions. So, just for example, one question in this section is: How attractive do you feel the downtown area of your community is? From 1 to 7, extreme lack of character and unattractive to extreme abundance of character and very attractive. And then it asked about attractiveness of the region surrounding your community. It has some questions about community attachment that's kind of a measure -- a way to measure the sense of place that one has associated with the place where one lives. To what extent do you feel at home in your community? If you had to move away, how happy or sad would you be to go? Community cohesiveness... how often do people work together to get things done in your community?

Remember under that first definition of community I gave, the kind of formal definition that was several days ago, I -- the third item on one of the slides was called community field, which was the working together to accomplish -- to find collective solutions to collective problems. And so this community cohesiveness is a way of getting at that, how supportive of one another are people who live in your community, you know. This is kind of a measure of social capital, too, right, for those of you familiar with that term.

Infrastructure... rating all different kinds of infrastructure in the community from roads to schools to police to fire from extremely inadequate to extremely adequate.

Effectiveness of your community government. Community preparedness for the future. That's kind of an interesting one, huh? You know, if you're familiar -- I lived in Washington and Oregon kind of during the spotted owl stuff, and, you know, there were some communities that said, okay, we see the writing on the wall, we think we can pull ourselves into the future without as much dependence on the timber industry, and we're going to start going for it. And other communities, you know, had to be dragged kicking and screaming, you know, into the -- you know, into the future without that preparedness. Not to say that one strategy is necessarily better than the other. They each worked in some cases, but, you know, some communities are going to be more prepared to adapt and -- to changing conditions that are outside their control, which is what is happening with a lot of social and economic and environmental forces in the world. Rural communities are being affected in a lot of ways that they have no influence over whatsoever, and that's where this issue of resiliency comes up.

So you can look through this and look at the concepts they're measuring and it's kind of interesting and I think you'll get some ideas about how to think about your communities that you're associated with when you're doing your RMP, and it kind of gives you a new set of lenses through which to view those communities.

So one of the reasons that this study was done was to develop a measure of community resiliency, and this was defined as the ability of a community either to cause desired change or to adapt successfully to it. So it's kind of -- you know, this is called community vulnerability -- the flip side is community vulnerability, and I kind of like to accentuate the positive writ doesn't make a difference, so why not call it resiliency and say some communities are more or less resilient. I mean, it means the same thing, but I just kind of like the term resiliency more than talking about vulnerability.

And what was found in this study was that economic character and diversity, the quality of leadership, the level of social cohesiveness and social capital, the perceived amenity value of the area inside the town and right outside it, and pop -- I'll say something about population size. And population size were -- were in the right direction, they indicated a more resilient community. Population size was an interesting one. This study didn't even look at places that were over 10,000 in population size because the assumption was made that rural communities under 10,000 would be the least resilient because they don't have probably as diverse an economic base. They don't have the human capital, maybe. They don't have the social capital. They're like likely to have it in their community than a larger place. So we were saying essentially we're not so worried about the larger places because they can probably take care of themselves. What

we're going to focus on -- not that there's no risk there, but the risks of change are greater in the smaller communities that may be less better equipped. So -- but other things being equal, population size does appear to contribute to a community's ability to adapt successfully and sustain its activities into the future.

One interest -- there were a lot of interesting findings from this study. One interesting one was that a lot of towns that had been previously timber towns were among the most resilient, because a lot of them had had to deal with major disruptions of activity in the past, either a mill closing or a shifting, and although John has pointed out that from a regional standpoint this is not a societal issue, from a local standpoint, from a community standpoint, if all of the people employed at the mill are members of the community, then it is a real issue at that smaller scale, and so communities that had been able to deal with, say, the closure of a mill in the past and were able to proceed into the future were more likely to be able to do so again, which kind of makes sense, doesn't it? So that's why I say recent events and trends can indicate sources of -- and level of resiliency. The least resilient communities were community -- tended to be communities on Indian reservations.

One interesting thing was that there were a lot of pathways to resiliency, and resiliency, of course, in this case is kind of a good thing for a community to possess. You know, there was -- you know, you could have very strong leadership in a community, and could that pull you through, even if you didn't have some of the other characteristics of resiliency. Or you could have a strong economic base and a diverse economic base but not the leadership, and that might pull you through. And there were some towns, I

remember in particular Shanico, those of you who have driven through Shanico, Oregon on your way to and from the Columbia Gorge, maybe, may note that this is a town of about 25, and it's a small town, and it's always been a small town, and it's always going to be a small town, and it's resilient by virtue of its, you know, place on the road where people are naturally going to stop, and it's kind of immune to lots of social forces because, you know -- because of its tiny size and its location along a road corridor. It was kind of interesting. You would never expect Shanico to score high on a measure of resiliency relative to all of these other communities in the region. So this -- there were some kind of surprising results of this analysis.

So you know, I'm not going to turn this into an exercise or anything, but I just want to pose a couple questions for you to think about. When you think about your community or communities you're familiar with, you know, what would you think about their resiliency? You know, would it be relatively high? Relatively low? You know, and why? You know, what factors might contribute to that? And how does the level of resiliency affect a community's ability to deal with impacts of BLM activities? And so you can kind of view resiliency as a buffer, you know, towns and places that have more resiliency because of whatever set of characteristics they have are going to be more likely to successfully deal with some impacts of what we do even if they're perceived as negative. It doesn't mean you can say, "Oh, you guys will do fine. Don't worry about this." You know. But it gives you a way to distinguish across communities that are associated with your resource area, whether you measure it formally or informally. If you're in the Columbia basin, you know, you can go back to those reports and take a look at those results and discuss them with the people in your community and say, "Is

this still true? Has this changed?" So in some cases, if you live in the right area, some of those reports may be useful. But I think it's an important enough concept that I wanted to mention it at this stage.

Yes?

CLASS PARTICIPANT: I have a question. Did you look at all at the resiliency versus where -- whether or not your population was stable or whether or not you had a lot of influx of new people moving?

PRESENTER: Well, that's interesting. I don't think -- I don't think that was one of the variables that was studied in here. You know, I could see it kind of working either way, couldn't you? I mean, it would depend. I would think that, you know -- I mean, the thing with resiliency doesn't mean that you're always going to stay the same. It means you're going to be able to, you know, successfully function as a community into the future, and that doesn't mean you're going -- you know, comparing it to an ecosystem, it isn't mean you're going to go along a certain pathway. You know, you have all these invasive species coming in, in terms of newcomers, that could set you off on a different path, right? That could disrupt, you know, the present system of activities and send you off on a totally different course. But is that going to be more resilient or less resilient to the community as a whole? There may be some differences within the community. So that -- you know n some cases that might be an example of where a community, you know, doesn't make a great unit of analysis because some people may fare quite well and others may not be able to continue their lifestyle. But, yeah, you would certainly

think that that would have an effect, wouldn't you?

CLASS PARTICIPANT: [inaudible] their timber industry shut down [inaudible]

PRESENTER: But they sure whined when those mills were getting shut down, didn't they? You know. And it was not a trivial impact, and some places are doing much better than others. You know, a place like Ketchikan, you know, does have a pretty strong tourism base, and they worked to development, and Sitka, too, is another good example, and they're also two of the larger communities in southeast -- outside Juneau. So they did okay, but it was -- it was hell when those mills were closing, you know, for everyone involved. There was no question. But you look at them now, and they have survived. I'm going to talk about southeast Alaska towns in step 6, too, and talk about them in a little more detail.